



# 100-J Water Quality General Permit Supplemental Application Information

In addition to [LUCS](#), [EPA Form 1](#) and [EPA Form 2E](#)

DEQ Use Only	
Received:	_____
Amount Received:	_____
Check #:	_____
Deposit #:	_____
App#:	_____

## A. Facility

Provide the following information on the location and type of discharge to determine eligibility for permit coverage. Any facility not eligible for permit coverage under this general permit may seek authorization to discharge under an individual permit.

		Yes	No
1.	Is this application for a hydroelectric facility? (If no, skip to question 2.)		
a	Is this facility solely located in Oregon?		
b	Does this facility have a FERC license or Biological Opinion?		
c	<b>Check the box</b> if the following are attached: A FERC license, Biological Opinion, or a Biological Opinion issued in conjunction with the FERC license as required in Schedule D2 of the 100-J permit.		

		Yes	NA
d	Which of the following statements apply per the EPA's July 2022 <a href="#">Revised Framework</a> referenced in Schedule D2: Cooling Water Intake Structures of the 100-J permit? If yes, provide citations to the attached material for those that apply. (E.g. Ch. 2, Sect. 3, Pg. 4, etc.)		
	The volume of cooling water used is relative to other power generation facilities and is relative to the total water use at the facility.		
	Cite _____		
	The cooling water that is withdrawn is relative to the flow of the waterbody.		
	Cite _____		
	The intake structure location is addressed per the EPA's Revised Framework.		
	Cite _____		
	Facility Technologies are addressed per the EPA's Revised Framework.		
	Cite _____		

### Translation or other formats

		Yes	No
2.	Is this application for an industrial/commercial facility?		
a	Is this a steam electric generating facility that is subject to effluent limit guidelines in <a href="#">40 CFR Part 423</a> ?		
b	Per Section 9 of EPA Form 1, is surface water used as the source for cooling water?		
c	Is the source of surface water from a supplier independent of the facility? (Note: A supplier is not a public water system or other source listed in <a href="#">40 CFR Part 125.91(c)</a> .)		
d	If yes to (b or c), attach the Oregon Department of Fish and Wildlife inspection letter referenced in Schedule D1 of the 100-J permit. (Check box to confirm.)		

		Yes	No
3.	Do any outfalls discharge through a storm sewer? (If no, go to question 4.)		
a	If yes, are the discharge locations annotated on the topographic map, per EPA Form 1, Section 7? This includes storm sewer entry and discharge point to the receiving waterbody. (Check box to confirm.)		
b	If yes, attached approval letter from storm sewer authority. (Check box to confirm.)		

		Yes	No
4.	Provide information on the status of permit coverage:		
a	Is this an application for a new facility?		
b	Does this facility have an existing NPDES permit (individual or general permit) for this type of discharge?		
If yes, enter permit number:			
c	Is there a pending NPDES application on file with DEQ for this discharge?		
Application Number:		File Number: (if available)	
Date of submittal			

		NA	Yes	No
5.	As indicated in EPA Form 2E, Section 3.2, are cooling water additives expected to contain prohibited toxics as listed in Schedule A1.2.d of the 100-J permit? (Check NA, if cooling water additives are not used.)			

6	Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s). (Check box to confirm.)	
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## B. Discharge Flow

Please provide the following information on the discharge flow to the receiving water for all industrial/commercial non-contact cooling water from the facility or cooling water discharges from a hydroelectric facility. Then provide the total flow ( $Q_{ed}$ ) in MGD in the space provided. Attach additional pages if necessary.

Note: Use the flow reported here for the facility's effluent flow limit, and its excess thermal load limit as applicable.  $Q_{ed}$  for an industrial/commercial facility may not exceed 0.5 MGD.

	DEQ Use Only		Industrial/Commercial	Hydroelectric
1.	Outfall #	Facility Identifier for this Outfall	Maximum Daily Design Effluent Flow (MGD)	Maximum Design Effluent Flow (MGD)
	Total ( $Q_{ed}$ )			
	<input type="checkbox"/> Check if additional outfall records are attached.			

Use any of the following mapping/database tools to provide information on this application.

- The [Water Quality Standards and Assessment Tool](#) hydrography layer can be used to identify receiving water, river mile, basin (6-digit HU basin), subbasin (8-digit HU subbasin) and watershed (10-digit HU watershed).
- DEQ's Integrated Report Database and Interactive Web Map on the [Approved Integrated Report page](#) can be used to identify receiving water name, HUC 12 watershed name, identify temperature criteria, water quality limited water.
- [USGS StreamStats](#) can be used for low flow statistic information
- Use the [Beneficial Uses of Oregon's Waters web page](#) to identify fish use designations.
- DEQ subbasin maps and tables set out in [OAR 340-041-0101 to 340-041-0340](#) can be used to identify temperature criteria

## C. Receiving water not eligible for permit coverage

Provide the following information on the location of the discharge to determine eligibility for permit coverage. Any facility not eligible for permit coverage under this general permit may seek authorization to discharge under an individual permit.

		Yes	No
1.	Do any of the following the statements apply? If yes, this facility is ineligible for a 100-J permit. (See the coverage and eligibility section of the 100-J permit for more details.)		
a	This application is for a new or increased discharge to a natural lake.		
Permit coverage is not provided for a new or increased discharge to a natural lake. The term lake is consistent with the term natural lake in the temperature criterion contained in <a href="#">OAR 340-041-0028(6)</a> . Further information on a natural lake and this temperature criterion is available on DEQ's Internal Management Directives web page in the <a href="#">Temperature Water Quality Standard Implementation IMD (April 2008)</a> .			
b	This application is for any of the following waters stated below.		
An ocean or bay or an outstanding resource water which includes the North Fork Smith River, its tributaries and associated wetlands, ( <a href="#">OAR 340-041-0305(4)</a> ), Waldo Lake ( <a href="#">OAR 340-041-0345(7)</a> ), and Crater Lake ( <a href="#">OAR, 340-041-0185(6)</a> ). Permit coverage is not provided for a discharge to an ocean or bay or outstanding resource water.			
c	This application is for a new discharge to a receiving water that is included in Table 1.		
Permit coverage is not provided for a new discharge to a receiving water that is included in Table 1 of the 100-J permit.			

**Table 1: TMDLs – Permit Coverage Not Available**

TMDL Document	Date of EPA Approval	Basin, Subbasin, and/or Watershed
Willamette Basin TMDL, Chapter 5	DEQ, 2006	Lower Willamette Subbasin (Columbia Slough and Fairview Creek watersheds only)
Bear Creek Watershed Total Maximum Daily Load and Water Quality Management Plan	DEQ, 2007	Rogue: Bear Creek Watershed
Molalla-Pudding Subbasin TMDL and WQMP	DEQ, 2008	Willamette: Molalla-Pudding Subbasin
Middle Columbia-Hood (Miles Creeks) Subbasin TMDL and WQMP	DEQ, 2008	Columbia-Hood: Middle Columbia-Hood Subbasins (Miles Creeks)
Western Hood Subbasin Temperature Total Maximum Daily Load, Revision to the 2001 Western Hood Subbasin TMDL	DEQ, 2018	Columbia-Hood: Western Hood Subbasin
Willow Creek Subbasin Temperature, pH, and Bacteria Total Maximum Daily Loads and Water Quality Management Plan	DEQ, 2007	Umatilla: Willow Creek

**Table 1: TMDLs – Permit Coverage Not Available**

TMDL Document	Date of EPA Approval	Basin, Subbasin, and/or Watershed
Walla Walla Subbasin Stream Temperature Total Maximum Daily Load and Water Quality Management Plan	DEQ, 2005	Umatilla: Walla Walla Subbasin
Little River Watershed TMDL	DEQ, 2001	Umpqua: Little River Watershed
Malheur River Basin TMDL and WQMP	DEQ, 2010	Malheur Basin
Columbia and Lower Snake Rivers Temperature TMDL	EPA, 2020	Columbia and Lower Snake Rivers

## D. Receiving waterbody

1.	Please identify the following:	
	Type of Receiving Water:	
	Receiving Water Name:	
	River Mile, if applicable:	
	Basin Name:	
	Subbasin Name:	
	Watershed Name:	

		Yes	No
2.	Does the facility discharge or propose to discharge into the mainstem of the Willamette River? Note: Permit coverage under this permit will not be provided if a bubble allocation is not available. If no, skip to question 3.		

3.	<p>Please provide the 7Q10 low stream flow rate (<math>Q_a</math>) in cfs. DEQ will accept a calculation using <a href="#">USGS StreamStats</a> or 7Q10 low flow analysis from hydrologist or certified by a registered professional engineer. If this discharge is to a natural lake, skip to 6a below.</p> <p>(If StreamStats is used, calculate an estimate of 7Q10 low flow from its Low-Flow Statistics Report. This can only be done when a prediction interval is provided. Calculate the estimate using the following equation:  <b><math>[(7 \text{ Day } 10 \text{ Year Low Flow Value} + \text{prediction interval-lower value (Pil)}) / 2]</math></b> .</p>	
a	Stream flow rate ( $Q_a$ ) in cfs:	

Please provide the source of information (e.g. USGS Low-Flow Statistics report) and any calculation(s) used to provide 7Q10 low stream flow rate or critical low stream flow.

For discharges through a storm sewer, streamflow is determined for the stream at the point where the storm sewer discharges to the receiving water.)

b	Check the box to indicate this documentation is attached.		
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4. Using  $Q_{ed}$  in MGD and  $Q_a$  in cfs from above, calculate dilution at the regulatory mixing zone boundary ( $S_{25}$ ) using the following equation. Dilution ( $S_{25}$ ) allowed for a natural lake is always one (1).

Provide dilution ( $S_{25}$ ):		$S_{25} = [(Q_{ed} * 1.5472) + (Q_a * 0.25)] / (Q_{ed} * 1.5472)$
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5. Compare ( $S_{25}$ ) to ( $S_{MZ Max}$ ) and provide the lower of the two as the critical mixing zone dilution. ( $S_{MZ Max}$ ) can be found in permit Tables A1-1 or A2-1 of the 100-J permit and in Table 2 below.

Provide the lower of ( $S_{25}$ ) or ( $S_{MZ Max}$ ) as a critical mixing zone dilution ( $S_{MZ}$ )	
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<b>Table 2: Mixing Zone Maximum Dilution</b>	
$S_{25}$	$S_{MZ Max}$
$\leq 38$	22
$>38$ and $\leq 51$	24
$>51$ and $\leq 63$	27
$>63$ and $\leq 76$	29
$>76$ and $\leq 101$	32
$>101$ and $\leq 126$	37
$>126$ and $\leq 251$	42
$>251$	67

Million Kcal/day	NA
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6. Calculate the excess thermal load limit using total flow ( $Q_{ed}$ ) in MGD from B1 above and dilution ( $S_{MZ}$ ) in D5. (No more than 0.5 MGD is allowed for an industrial/commercial facility.)

a	Natural Lake discharge ( $Q_{ed} * 1.14$ )		
b	Other receiving water ( $Q_{ed} * S_{MZ} * 1.14$ )		

**Check**

c	If there is no fish use, attach a downstream effects analysis documentation per Schedule D1 of the permit. Check box to confirm attachment.	
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## E. Total Maximum Daily Load (category 4A) for temperature

TMDLs that will result in the waterbody meeting water quality standards and supporting its beneficial uses have been approved (Category 4A in the integrated report) for some waterbodies. Use Appendix A in the permit to answer the following questions for the applicable TMDL.

		Yes	No
1.	Is the receiving water where discharge occurs identified in Appendix A of the 100-J permit? If yes, additional excess thermal load limitations apply. (If no, skip to section F)		

2.	Please provide the following TMDL information from Appendix A.	
a	Basin/Subbasin and/or Watershed name:	
b	Timeframe(s):	
C	Which TMDL Excess Thermal Load Limits Applies? (check one)	
	Specific TMDL Excess Thermal Load:	
	Equation: $[Q_{ed} * (0.14 * S_{25} - T_{sp}) * 3.78541]$	
Provide the value if this facility received a specific excess thermal load in Appendix A:		
		Million Kcal/day

		Check	°C	°F
d	If this facility uses an excess thermal load equation, select from the following to designate the basis for temperature and provide in degrees Celsius ( $^{\circ}\text{C} = (^{\circ}\text{F} - 32) * 5/9$ ).			
	Applicable system potential temperature ( $T_{sp}$ , found in TMDL)			
	System potential temperature (found in Appendix A)			
	Biologically based numeric criteria (BBNC; found in Appendix A):			

e	If a facility received an equation to calculate excess thermal load, provide the calculated value here. (Note: Units for $Q_{ed}$ are in MGD and units for $T_{sp}$ are in $^{\circ}\text{C}$ )	
	million Kcal/day	$[Q_{ed} * (0.14 * S_{25} - T_{sp}) * 3.78541]$

## F. Water quality standard temperature criteria:

1.	In the table below, please indicate all the applicable fish uses, timeframes, and temperatures for the receiving waterbody. Check all that apply)			
	<b>Fish use/Receiving Steam Type</b>	<b>Applies</b>	<b>Timeframe</b>	<b>°C</b>
	Salmon and Steelhead Spawning			
	Bull Trout Spawning and Juvenile Rearing			
	Core Cold Water Habitat			
	Salmon and Steelhead Rearing/Migration			
	Migration Corridor			
	Lahontan Cutthroat Trout or Redband Trout			
	Unidentified Tributaries (Note: Criteria for these waters are the same criteria as is applicable to the nearest downstream water body depicted on the applicable map.)			
	Natural Lake (ambient temperature)			
	Other fish use designation applies based on a site-specific water quality criterion.			
	There is no fish use designation			

		<b>NA</b>	<b>Yes</b>	<b>No</b>
2.	Where spawning is a designated fish use, is there documentation indicating that spawning is not or likely will not to be located within the downstream regulatory mixing zone? (If yes, confirm that it's attached.)			

		<b>Yes</b>	<b>No</b>
3.	Is this an existing discharge to a natural lake?		
a	Has the ambient monitoring protocol been approved?		
b	Are the ambient temperature monitoring results attached?		



## G. Impaired water (category 5) or Total Maximum Daily Load (category 4A) for pH

Water bodies identified as not meeting water quality standards through the Integrated Report assessment method are in the impaired category, known as the [303\(d\) list](#), (category 5 in the Integrated Report) named for the section of the federal Clean Water Act that establishes this overall process. The 303(d) list shows us which waterbodies are impaired. A [TMDL](#) is a clean water plan (category 4A in the Integrated Report).

		Yes	No
1.	Is the receiving water listed as impaired for pH on DEQ's 303(d) list under Category 5 within the integrated report?		
2.	Is the receiving water listed as a Category 4A for which a TMDL is approved or established by EPA?		
a	Has a wasteload allocation been established?		

## H. Total residual chlorine

		Check
1.	Per EPA Form 2E, Section 3 Waste Types: Check all that apply.	
	Chlorine is added as a biocide.	
	Potable (chlorinated) water is used for the non-contact cooling water system.	
	NA	
2.	Please provide the Total Residual Chlorine concentration sample results with corresponding outfall #(s). Note: If sampled source water has a TRC result less than the quantitation limit of 0.05 mg/L using a <a href="#">40 CFR Part 136</a> method analysis, than TRC limits will not apply to that outfall(s).	
	Sample result (mg/L)	Outfall #(s)
		NA

## I. Land application

		Yes	No
1.	Will wastewater used for land applications? (If no, skip this section.)		

		Check
2.	Location of land application (select all that apply)	
a	Wastewater will be discharged on the property from which it was generated	
b	Wastewater will be discharged on an adjacent property. (Attached is a signed agreement with the property owner)	

3.	Attached is a Land Application Plan that includes the following information:	
	<ul style="list-style-type: none"> <li>a. Site description, including site and surrounding property use, zoning, area (acreage receiving water), soil profile, depth to groundwater, setbacks.</li> <li>b. Description of application method details of sprinkler, hand line, or pivot system.</li> <li>c. Figure of general location for land application and surrounding area</li> <li>d. Figure with details to scale that includes (boundaries, size in acres, surface streams, springs, ditch or other water bodies, septic drain fields or on site-systems, stormwater management structures, bio-swailes or stormwater collection systems, wells or proposed wells, escarpment (steep slopes or ridge lines), road cuts and filled low land, any drainage tiles or other field drainage system, any unstable landforms (slides, sink holes, etc.)</li> <li>e. Signed land use compatibility statement.</li> <li>f. Full wastewater characterization (in compliance with 40 CFR Part 136). Samples must be representative of all reuse water and analyzed for contaminants of concern that at a minimum will include: <ul style="list-style-type: none"> <li>1. Sodium Adsorption Ratio (SAR)</li> <li>2. Electrical Conductivity (EC), dS/m</li> <li>3. pH, SU</li> </ul> </li> <li>g. Wastewater monitoring schedule and analytical methods used.</li> <li>h. Flow schematic (size, capacity, flow rate) that includes components to collect, store and transport wastewater.</li> <li>i. Method of land application, Describe the irrigation system, were it is located, the size of the area that will be irrigated (in acres), what is grown in this area/crops, how the irrigation system operates (gravity flow, pumps, hand lines, big gun, in ground system, etc.), irrigation schedule including application rate of reuse water and fresh water, indicate the months when land application will occur and how the irrigation schedule was determined.</li> <li>j. Maintenance and Monitoring. Discuss how the system is managed and maintained. Include what conditions are monitored and where to ensure the irrigation activities follow the permit. Identify when the system will be shut down. (i.e. The system will be shut down when wind speeds exceed 10 miles per hour to prevent wind drift off site.) How will the soil moisture be monitored? How frequently will the system be moved to avoid ponding, flooding, or surface run off? Describe end of season irrigation shut down procedures. etc.</li> <li>k. Other information that describes how the site will be managed, as specified by DEQ.</li> </ul>	

## Signature of legally authorized representative

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I agree to pay the annual compliance determination fee invoiced annually by DEQ and all other fees required by Oregon Administrative Rules, Chapter 340, Division 045.

Name of Legally Authorized Representative	Title
Signature of Legally Authorized Representative	Date

### Definition of Legally Authorized Representative:

- See [40 CFR § 122.22](#) for more detail. Please also provide the information requested in brackets [ ]
- Corporation – President, secretary, treasurer, vice-president, or any person who performs principal business functions; or a manager of one or more facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million that is authorized in accordance to corporate procedure to sign such documents.
- Partnership – General partner [list of general partners, their addresses and telephone numbers].
- Sole Proprietorship – Owner(s) [each owner must sign the application].
- City, County, State, Federal, or other Public Facility – Principal executive officer or ranking elected official.
- Limited Liability Company – Member.
- Trusts – Acting trustee [list of trustees, their addresses and telephone numbers].

## Fee and application submittal

A fee is due if your facility does not have an active permit, for example, administratively extended permit coverage or if your facility did not submit an application for permit coverage between July 31, 2001, and Jan. 1, 2023 or Intent to Apply 60-Day Notice form.

Send application with enclosed fees to:	Send application with no fees enclosed to:
Oregon Department of Environmental Quality Attn: Business Office 700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100	Oregon Department of Environmental Quality Attn: Headquarters Water Quality – 14 <sup>th</sup> Floor 700 NE Multnomah Street, Suite 600 Portland, OR 97232-4100

	Yes	No
Fee enclosed		

## Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities. Visit DEQ's [Civil Rights and Environmental Justice page](#).